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HazCom 2012 Implementation

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HazCom 2012 Implementation



Presented by:

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Overview

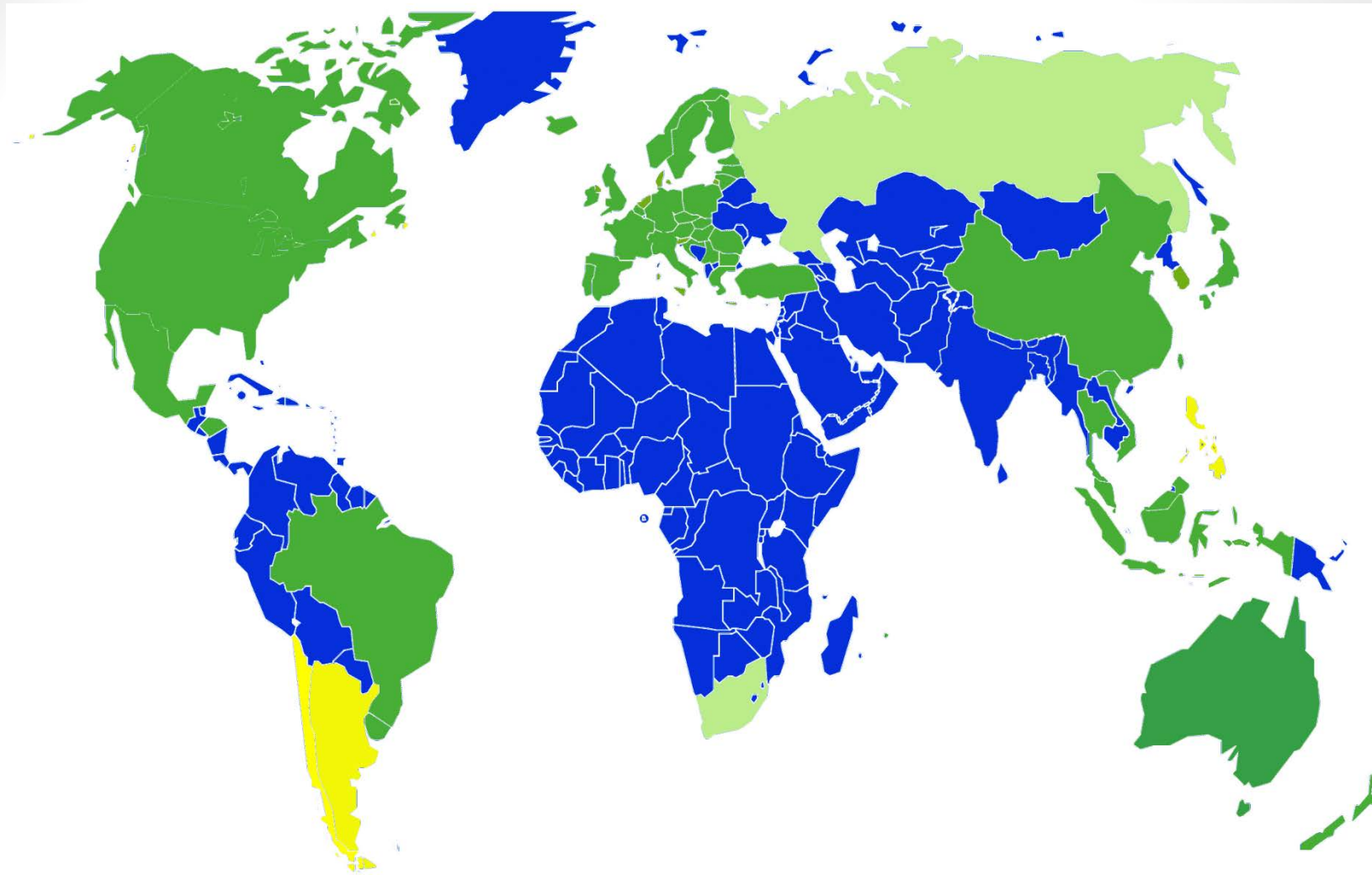
- **Review of changes to the OSHA Standard (HazCom 2012)**
- **How does this change MSDSs (SDSs) and labels?**
- **How does this change your training?**
- **How does this change your HazCom program?**
- **When do I have to be in compliance?**

Hazard Communication

- **Hazard Communication Standard promulgated in 1983 for manufacturing only**
 - 29 CFR 1910.1200
 - Also known as “Right to Know Law” or HAZCOM
 - Prevention of injuries and illnesses from chemical exposure
 - Provide knowledge of hazards to employees
 - Most cited OSHA standard for many years
- **1980 Executive Order 12196, Occupational Safety and Health Programs for Federal Employees**
- **Oklahoma Department of Labor Public Employee Occupational Safety and Health (PEOSH)**
- **1987 HazCom expanded to all industries**
- **2012 Global Harmonization System (GHS) requirements added**



- **GHS refers to the United Nations (UN) Globally Harmonized System of Classification and Labeling of Chemicals**
- **“Harmonize” the classification and the hazard communication elements of chemicals (labeling and safety data sheets)**



- Countries/regions that have already implemented GHS.
- Countries/regions where GHS is voluntary
- Countries/regions that are in the process of implementing GHS
- Countries/regions where GHS is not implemented or not available.

OSHA's Approach

- **Maintain the basic requirements of the current HazCom standard**
 - Only change those provisions that need to be changed to adopt the GHS
 - “Right to Know” becomes the “Right to Understand”
- **Maintain or enhance the level of protection provided by the HazCom standard**
- **Cost savings for companies doing business worldwide or using imported chemicals**

HazCom 2012

- **Published March 26, 2012**
- **Changes to:**
 - **Definition and classification of hazardous chemicals**
 - **Label content**
 - **Safety data sheet content (mandatory 16 section SDS)**

Hazard Communication

- **Employees have a right to know about the health hazards and physical hazards present on the job, and what precautions to take to prevent exposure**
- **Requirements:**
 - **Written Program**
 - **List of Hazardous Chemicals in the Workplace**
 - **Labeling**
 - **Manufacturer's Label**
 - **Workplace Labeling**
 - **Material Safety Data Sheets (now SDSs)**
 - **Employee Training**

Hazardous Chemical Definition

- **Old: "Hazardous chemical" means any chemical which is a physical hazard or a health hazard."**
- **New: "Hazardous chemical" means any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified.**

Health Hazard Definition

- **Old:** The term "health hazard" includes chemicals which are:
 - carcinogens,
 - toxic or highly toxic agents,
 - reproductive toxins, irritants,
 - corrosives,
 - sensitizers,
 - hepatotoxins,
 - nephrotoxins,
 - neurotoxins,
 - agents which act on the hematopoietic system, and
 - agents which damage the lungs, skin, eyes, or mucous membranes.
- **New:** "health hazard" means a chemical which is classified as posing one of the following hazardous effects:
 - acute toxicity (any route of exposure);
 - skin corrosion or irritation;
 - serious eye damage or eye irritation;
 - respiratory or skin sensitization;
 - germ cell mutagenicity;
 - carcinogenicity;
 - reproductive toxicity;
 - specific target organ toxicity (single or repeated exposure); or
 - aspiration hazard

Physical Hazard Definition

- Old: a chemical for which there is scientifically valid evidence that it is a:
 - combustible liquid,
 - a compressed gas,
 - explosive,
 - flammable,
 - an organic peroxide,
 - an oxidizer,
 - pyrophoric,
 - unstable (reactive) or
 - water-reactive
- New: "physical hazard" means a chemical that is classified as posing one of the following hazardous effects:
 - explosive;
 - flammable (gases, aerosols, liquids, or solids);
 - oxidizer (liquid, solid or gas);
 - self-reactive; pyrophoric (liquid or solid);
 - self-heating;
 - organic peroxide;
 - corrosive to metal;
 - gas under pressure; or
 - in contact with water emits flammable gas.

Hazard Classification

- If a company manufactures or repackages chemicals, this new hazard classification is/was required
- Each chemical/product must be evaluated to determine whether the chemical is classified as hazardous according to the new definition of hazardous chemical
- Classification must be evaluated based on weight of scientific evidence and by comparing the data with criteria for health and physical hazards published in the appendices to the standard
- The outcome of the hazard classification determines the signal word and hazard statements in the label and safety data sheet

Table B.6.1: Criteria for Flammable Liquids

Category	Criteria
1	Flash point < 23°C (73.4°F) and initial boiling point ≤ 35°C (95°F)
2	Flash point < 23°C (73.4°F) and initial boiling point > 35°C (95°F)
3	Flash point ≥ 23°C (73.4°F) and ≤ 60°C (140°F)
4	Flash point > 60°C (140°F) and ≤ 93°C (199.4°F)

Note: there is no “combustible liquid category”

NFPA and DOT still have “combustible liquid” definitions

“Combustible liquids are not regulated by the ICAO Technical Instructions, IATA Dangerous Goods Regulations or IMDG Code but they are regulated to, from, through or within the United States per 49 CFR 171.11(d)(3) and 171.12(b)(3) for air and vessel respectively.”

Table A.1.1: Acute Toxicity Hazard Categories and Acute Toxicity Estimate (ATE) Values

Exposure route	Category 1	Category 2	Category 3	Category 4
Oral (mg/kg bodyweight)	≤ 5	>5 and ≤ 50	>50 and ≤ 300	>300 and ≤ 2000
Dermal (mg/kg bodyweight)	≤ 5	>50 and ≤ 200	>200 and ≤ 1000	>1000 and ≤ 2000
Inhalation - Gases (ppmV)	≤ 100	>100 and ≤ 500	>500 and ≤ 2500	>2500 and ≤ 20000
Inhalation - Vapors (mg/l)	≤ 0.5	>0.5 and ≤ 2.0	>2.0 and ≤ 10.0	>10.0 and ≤ 20.0
Inhalation – Dusts and Mists (mg/l)	≤ 0.05	>0.05 and ≤ 0.5	>0.5 and ≤ 1.0	>1.0 and ≤ 5.0

Note: the toxicity is to be for the product as is, not individual components

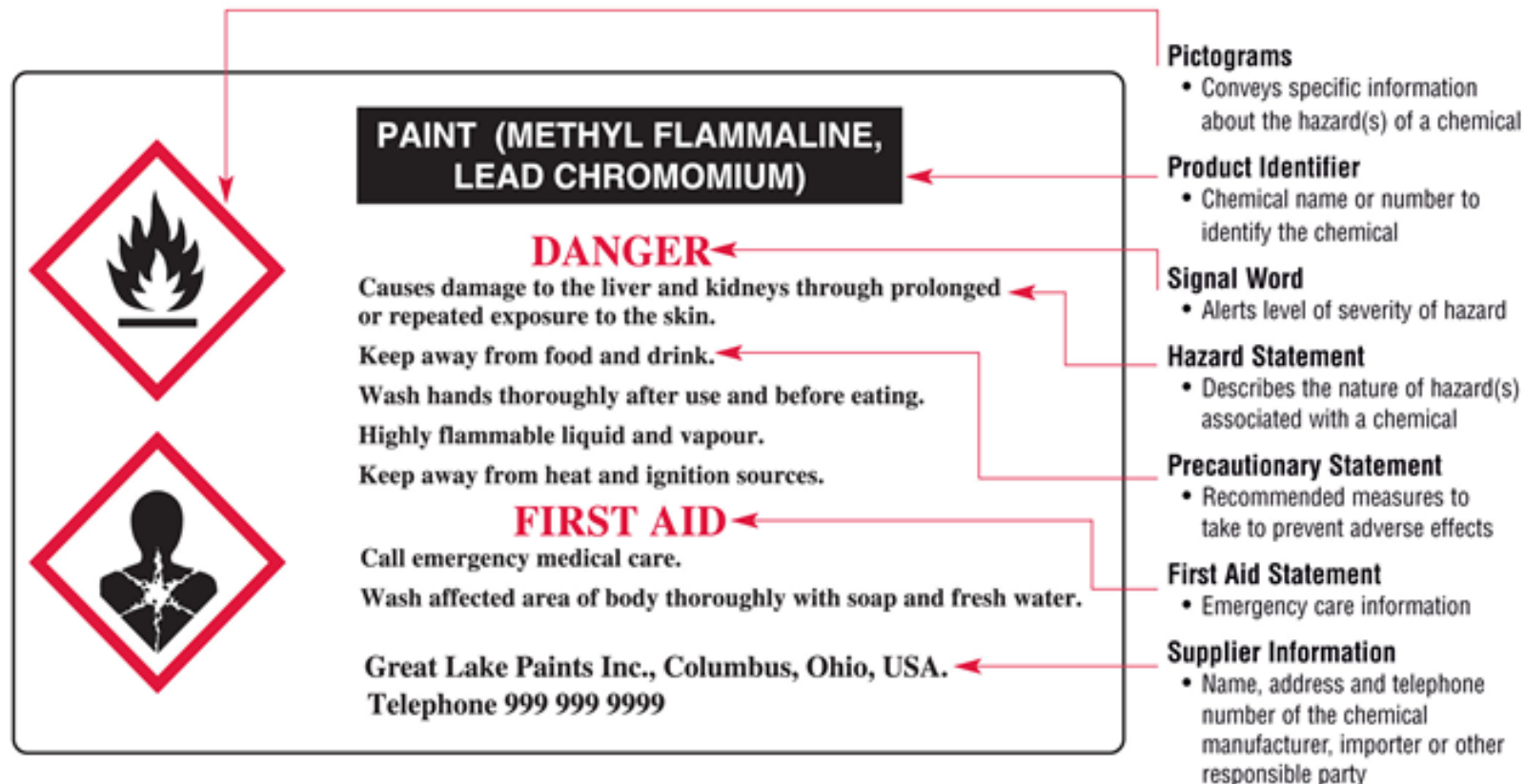
Hazard Classification

- **Some chemicals and chemical products may now be classified differently than before:**
 - **Some chemicals that were defined as hazardous may no longer be**
 - **Some chemicals that were defined as not hazardous may now be**
 - **Some chemicals previously defined as combustible may now be considered flammable**
 - **Hazard classification of mixtures must be on the mixture as a whole, rather than the individual components**

New Labeling Requirements

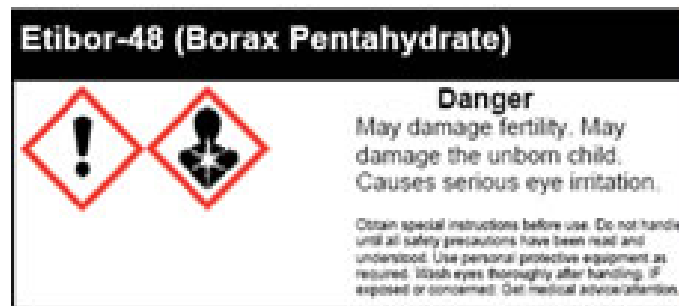
- Based on the classification, the chemical manufacturer/importer must provide the following on each container that is shipped:
 - Product identifier
 - Signal word
 - Hazard statement(s)
 - Precautionary statement(s)
 - Pictogram(s)
 - Name, address, and telephone number for the chemical manufacturer, importer, or other responsible party

HCS/GHS Labeling Components



Product Identifier

- The name or number used for a hazardous chemical on a label or in the SDS that provides a unique means by which users can identify the chemical and which permits cross-referencing between the list of hazardous chemicals, label and SDS




Signal Word

- A word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label

“Danger” – used for the more severe hazards

“Warning” – used for the less severe

- The word to be used is specified in Appendix C based on the hazard classification

SAMPLE LABEL	
PRODUCT IDENTIFIER CODE _____ Product Name _____	HAZARD PICTOGRAMS 
SUPPLIER IDENTIFICATION Company Name _____ Street Address _____ City, State _____ Postal Code _____ Country _____ Emergency Phone Number _____	SIGNAL WORD Danger
PRECAUTIONARY STATEMENTS Keep container tightly closed. Store in cool, well ventilated place that is locked. Keep away from heat/sparks/open flame. No smoking. Only use non-sparking tools. Use explosion-proof electrical equipment. Take precautionary measure against static discharge. Ground and bond container and receiving equipment. Do not breathe vapors. Wear Protective gloves. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Dispose of in accordance with local, regional, national, international regulations as specified. In Case of Fire: use dry chemical (BC) or Carbon dioxide (CO ₂) fire extinguisher to extinguish. First Aid If exposed call Poison Center. If on skin (on hair): Take off immediately any contaminated clothing. Rinse skin with water.	HAZARD STATEMENT Highly flammable liquid and vapor. May cause liver and kidney damage. SUPPLEMENTAL INFORMATION Directions for use _____ _____ _____ Fill weight Lot Number _____ Gross weight Fill Date _____ Expiration Date: _____

Hazard Statement

- Hazard statement for each level of hazard within each hazard class (from Appendix C)
 - Example: Flammable liquids
 - Category 1: Extremely flammable liquid and vapor
 - Category 2: Highly flammable liquid and vapor
 - Category 3: Flammable liquid and vapor
 - Category 4: Combustible liquid

HAZARD PICTOGRAMS



SIGNAL WORD

Danger

HAZARD STATEMENT

Highly flammable liquid and vapor.
May cause liver and kidney damage.

SUPPLEMENTAL INFORMATION

Directions for use

Fill weight Lot Number

Gross weight Fill Date

Expiration Date

Precautionary Statements

- Precautionary statements are selected from tables in Appendix C, based on the classification
- Four types of precautionary statements required:
 - Prevention
 - Response
 - Storage
 - Disposal

PRODUCT IDENTIFIER

CODE

Product Name

SUPPLIER IDENTIFICATION

Company Name

Street Address

City State _____

Postal Code Country _____

Emergency Phone Number _____

PRECAUTIONARY STATEMENTS

Keep container tightly closed. Store in cool, well ventilated place that is locked.

Keep away from heat/sparks/open flame. No smoking.

Only use non-sparking tools.

Use explosion-proof electrical equipment.

Take precautionary measure against static discharge.

Ground and bond container and receiving equipment.

Do not breathe vapors.

Wear Protective gloves.

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

Dispose of in accordance with local, regional, national, international regulations as specified.

In Case of Fire: use dry chemical (BC) or Carbon dioxide (CO₂) fire extinguisher to extinguish.

First Aid

If exposed call Poison Center.

If on skin (on hair): Take off immediately any contaminated clothing. Rinse skin with water.

Precautionary Statements

Flammable Liquids

Prevention	Response	Storage	Disposal
<p>Keep away from heat/ sparks/open flames/ hot surfaces. – No smoking</p> <p>Keep containers tightly closed.</p> <p>Ground/Bond container and receiving equipment.</p> <p>Use explosion-proof electrical/ ventilating / lighting/....equipment.</p> <p>Use only non-sparking tools.</p> <p>Take precautionary measures against static discharge.</p> <p>Wear protective gloves/ eye protection/ face protection</p>	<p>If on skin (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>In case of fire: Use ... for extinction.</p>	<p>Store in a well-ventilated place. Keep cool</p>	<p>Dispose of contents/container to...</p> <p>... in accordance with local/ regional/ national/ international regulations (to be specified)</p>

GHS Pictograms



FLAMMABLE



CORROSIVE



EXPLOSIVE



COMPRESSED
GAS



OXIDIZING



TOXIC



HEALTH
HAZARD




HARMFUL/
IRRITANT



DANGEROUS FOR
THE ENVIRONMENT

New Labeling Requirements

- Based on the classification, the chemical manufacturer/importer must provide the following on each container that is shipped:
 - Product identifier
 - Signal word
 - Hazard statement(s)
 - Precautionary statement(s)
 - Pictogram(s)
 - Name, address, and telephone number for the chemical manufacturer, importer, or other responsible party

SAMPLE LABEL	
PRODUCT IDENTIFIER CODE _____ Product Name _____	HAZARD PICTOGRAMS 
SUPPLIER IDENTIFICATION Company Name _____ Street Address _____ City, State _____ Postal Code, Country _____ Emergency Phone Number _____	SIGNAL WORD Danger
PRECAUTIONARY STATEMENTS Keep container tightly closed. Store in cool, well ventilated place that is locked. Keep away from heat/sparks/open flame. No smoking. Only use non-sparking tools. Use explosion-proof electrical equipment. Take precautionary measure against static discharge. Ground and bond container and receiving equipment. Do not breathe vapors. Wear Protective gloves. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Dispose of in accordance with local, regional, national, international regulations as specified. In Case of Fire: use dry chemical (BC) or Carbon dioxide (CO ₂) fire extinguisher to extinguish. First Aid If exposed call Poison Center. If on skin (on hair): Take off immediately any contaminated clothing. Rinse skin with water.	HAZARD STATEMENT Highly flammable liquid and vapor. May cause liver and kidney damage. SUPPLEMENTAL INFORMATION Directions for use _____ _____ Fill weight: Lot Number _____ Gross weight: Fill Date _____ Expiration Date: _____

Labels, cont.

- **No size requirements for labels**
- **No exemptions for small packages**
 - **Use pull-out labels, fold back labels, tags or other methods**
 - **OSHA's "Practical accommodations"**
 - The actual container holding the hazardous chemical must contain, at a minimum, the product identifier, pictogram(s), manufacturer's name and phone number, signal word, and a statement indicating the full label information for the chemical is provided on the outside package

Workplace Labels

- The employer shall ensure that each container of hazardous chemicals in the workplace is labeled, tagged or marked with either:
 - The information specified for labels on shipped containers, or
 - Product identifier and “words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under the hazard communication program, will provide employees with the specific information regarding the physical and health hazards of the hazardous chemical.”
 - Example: Gasoline - Flammable


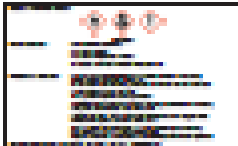
Workplace Labels

- Alternative labeling systems such as the National Fire Protection Association (NFPA) 704 Hazard Rating and the Hazardous Material Information System (HMIS) are permitted for workplace containers. However, the information supplied on these labels must be consistent with the revised HCS, e.g., no conflicting hazard warnings or pictograms.
- NFPA/OSHA Quick Card
http://www.nfpa.org/assets/files/aboutthecodes/704/nfpa704_hc2012_qcard.pdf
<https://www.osha.gov/Publications/OSHA3678.pdf>



OSHA[®] QUICK CARD

Comparison of NFPA 704 and HazCom 2012 Labels

	 NFPA 704	 HazCom 2012
Purpose	Provides basic information for emergency personnel responding to a fire or spill and those planning for emergency response.	Informs workers about the hazards of chemicals in workplace under normal conditions of use and foreseeable emergencies.
Number System: NFPA Rating and OSHA's Classification System	0-4 0-least hazardous 4-most hazardous	1-4 1-most severe hazard 4-least severe hazard <ul style="list-style-type: none">• The Hazard category numbers are NOT required to be on labels but are required on SDSs in Section 2.• Numbers are used to CLASSIFY hazards to determine what label information is required.

OSHA on HMIS

SUBSTANCE IDENTITY	
<input type="radio"/>	HEALTH
<input type="radio"/>	FLAMMABILITY
<input type="radio"/>	REACTIVITY
<input type="radio"/>	PERSONAL PROTECTION
HEALTH HAZARDS	

“Employers may continue to use rating systems such as National Fire Protection Association (NFPA) diamonds or HMIS requirements for workplace labels as long as they are consistent with the requirements of the Hazard Communication Standard and the employees have immediate access to the specific hazard information as discussed above. An employer using NFPA or HMIS labeling must, through training, ensure that its employees are fully aware of the hazards of the chemicals used.”















<https://www.osha.gov/Publications/OSHA3636.pdf>

Workplace Labels

- **Workplace labels or other forms of warning must be legible, in English, and prominently displayed on the container, or readily available in the work area throughout each work shift.**
- **Employers having employees who speak other languages may add the information in their language to the material presented, as long as the information is presented in English as well.**

OSHA Labels vs. DOT

Health Hazard  <ul style="list-style-type: none"> • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity 	Flame  <ul style="list-style-type: none"> • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides 	Exclamation Mark  <ul style="list-style-type: none"> • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non-Mandatory)
Gas Cylinder  <ul style="list-style-type: none"> • Gases Under Pressure 	Corrosion  <ul style="list-style-type: none"> • Skin Corrosion/ Burns • Eye Damage • Corrosive to Metals 	Exploding Bomb  <ul style="list-style-type: none"> • Explosives • Self-Reactives • Organic Peroxides
Flame Over Circle  <ul style="list-style-type: none"> • Oxidizers 	Environment (Non-Mandatory)  <ul style="list-style-type: none"> • Aquatic Toxicity 	Skull and Crossbones  <ul style="list-style-type: none"> • Acute Toxicity (fatal or toxic)

 <ul style="list-style-type: none"> • Flammable Gas • Flammable Aerosol 	 <ul style="list-style-type: none"> • Flammable solids • Self-Reacting substances and mixtures 	 <ul style="list-style-type: none"> • Pyrophoric solids • Pyrophoric liquids • Self-heating Substances and mixtures
 <ul style="list-style-type: none"> • Substances and mixtures, which in contact with water, emit flammable gases 	 <ul style="list-style-type: none"> • Oxidizing gases • Oxidizing liquids • Oxidizing solids 	 <ul style="list-style-type: none"> • Self reactive substances and mixtures (type B) • Organic peroxides
 <ul style="list-style-type: none"> • Explosives (Division 1.4) 	 <ul style="list-style-type: none"> • Explosives (Division 1.5) 	 <ul style="list-style-type: none"> • Explosives (Division 1.6)
 <ul style="list-style-type: none"> • Gases under pressure 	 <ul style="list-style-type: none"> • Acute toxicity: Oral • Acute toxicity: Skin • Acute toxicity: Inhalation 	 <ul style="list-style-type: none"> • Corrosive to metals • Skin corrosion/irritation
 <ul style="list-style-type: none"> • Aquatic toxicity (Acute) • Aquatic toxicity (Chronic) 	 <ul style="list-style-type: none"> • Organic Peroxides 	

- An OSHA/HazCom label is required for the workplace
- A DOT label is required for transport

Safety Data Sheets

- Incorporates a standard 16 section SDS
- SDSs must be in English; they may also be kept in other languages
- An updated SDS must be provided with products shipped beginning June 1, 2015
- Companies are not required to send new SDSs to previous customers who may still have the product in inventory
- New SDSs do not have to be provided for chemicals no longer produced
- The requirements to maintain MSDSs or SDSs under 29 CFR 1910.1020 have not changed
- The conditions under which employers may maintain SDSs electronically in the workplace have not changed

16 Sections of SDS

1. Identification

2. Hazards identification

- Classification (Hazard Class/Category)
- Labeling Signal Word, Symbol, Hazard Statements, Precautionary Statements

3. Composition/information on ingredients

- Substances – name, CAS/other identifier, impurities, etc. that contribute to hazards
- Mixtures – name and exact percentage (unless a trade secret is claimed and then a concentration range may be used) of all ingredients classified as health hazards

16 Sections of SDS

4. First aid measures

5. Firefighting measures

6. Accidental release measures

7. Handling and storage including incompatibility

8. Exposure controls/personal protection

9. Physical and chemical properties

10. Stability and reactivity

11. Toxicological information

16 Sections of SDS

12. Ecological information

13. Disposal considerations

14. Transportation information

15. Regulatory information

16. Other information including the date of SDS preparation or last revision

Required to be present, the content is not regulated by OSHA

Effects on Other Standards

- **Substance Specific Standards**
 - **Changed workplace signs consistent with HCS**
 - Asbestos, lead, cadmium, 13 carcinogens
 - **Revised standards to reference HCS for labels, SDS and training**
 - Asbestos 1910.1001(j)(1)(iii): Employers shall include asbestos in the hazard communication program established to comply with the HCS (§ 1910.1200). Employers shall ensure that each employee has access to labels on containers of asbestos and to safety data sheets, and is trained in accordance with the requirements of the HCS.
 - Methylene Chloride 1910.1052(k)(1)(iii): Employers shall include MC in the hazard communication program established to comply with the HCS (§ 1910.1200). Employers shall ensure that each employee has access to labels on containers of MC and to safety data sheets, and is trained in accordance with the requirements of HCS and paragraph (l) of this section.
 - Chromium (VI) 1910.1026(l)(1)(iii): Employers shall include chromium (VI) in the hazard communication program established to comply with the HCS (§ 1910.1200). Employers shall ensure that each employee has access to labels on containers of chromium (VI) and to safety data sheets, and is trained in accordance with the requirements of HCS and paragraph (l)(2) of this section.

Effects on Other Standards

- **1910.1450 Laboratory Standard**
 - Updated definitions to maintain compatibility with HCS (hazardous chemical, health hazard, mutagen, physical hazard, reproductive toxin)

Training

- **Employees must be trained on the new label elements and safety data sheet format by December 1, 2013**
 - The 2013 training thus does NOT include a requirement to re-train on all hazards
 - The training is to ensure that employees understand the new label and SDS approach
- **If workplace labeling changed, workers will have to be trained on this as well – the timing will depend on when the workplace labeling is updated**
- **OSHA fact sheet on training requirements available at**
<http://www.osha.gov/Publications/OSHA3642.pdf>

Written Hazard Communication Program

- No changes to the existing component requirements
- Employers need to assure that the program is current and reflects the revised regulation
 - Will workplace labeling change?
 - Does your program include references to hazard definitions that may need to be updated?
 - Change MSDS references to SDS
 - Update the list of hazardous chemicals as needed based on revised SDSs received
 - Some chemicals previously not hazardous may now be classified as hazardous
 - Some classifications may change based on the new mixture requirements

HazCom 2012 Effective Dates

- The final rule became effective May 25, 2012
- Employers were required to train employees on the new labels and SDS format by December 1, 2013
- Manufacturers, importers, distributors, and employers required to comply by June 1, 2015
 - Could ship products labeled under the old system until December 1, 2015
- Distributors cannot ship containers without compliant labels after December 1, 2015
- Employers must update HazCom programs, workplace labeling, and provide additional training for any new hazards identified as a result of the transition to the GHS system by June 1, 2016

February 9, 2015 Memorandum

Question: I'm an employer, and have not received updated SDSs or labels for some of the hazardous chemicals I use in my business. Will OSHA issue a citation to me?

Answer: No. Once you receive HCS 2012-compliant SDSs, you must maintain them. Once you receive HCS 2012-compliant labels, you may either maintain them on the chemical containers or follow the workplace labeling requirements contained in 1910.1200(f)(6)-(10).

Recent Citations

“On or about October 27, 2015, employees in Building A were exposed to chemical and fire hazards while using penetrating oil and a cutting lubricant in spray bottles, without any form of label or markings as to the chemical’s identity.”

29 CFR 1910.1200(f)(6)(ii): Except as provided in 29 CFR 1910.1200(f)(7) and 29 CFR 1910.1200(f)(8), the employer did not ensure that each container of hazardous chemicals in the workplace was labeled, tagged or marked with the product identifier and words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals and which, in conjunction with the other information immediately available to employees under the hazard communication program, would provide employees with the specific information regarding the physical and health hazards of the hazardous chemical.

Proposed Penalty: 04/28/2016 \$5500.00

Recent Citations

“On or about September 20, 2016, employees throughout the facility were exposed to chemical and fire hazards while using diesel fuel in oil jugs and sports drink bottles, without any form of label or markings as to the chemical’s identity.”

29 CFR 1910.1200(f)(6)(ii): Except as provided in 29 CFR 1910.1200(f)(7) and 29 CFR 1910.1200(f)(8), the employer did not ensure that each container of hazardous chemicals in the workplace was labeled, tagged or marked with the product identifier and words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals and which, in conjunction with the other information immediately available to employees under the hazard communication program, would provide employees with the specific information regarding the physical and health hazards of the hazardous chemical.

Proposed Penalty: 12/20/2016 \$8730.00
(Penalty included inappropriate container fine)

Useful Information

- **Side-by-Side Comparison of OSHA's previous Hazard Communication Standard vs. HazCom 2012**

<http://www.osha.gov/dsg/hazcom/side-by-side.html>

- **OSHA Quick Cards**

<https://www.osha.gov/Publications/OSHA3493QuickCardSafetyDataSheet.pdf>

<https://www.osha.gov/Publications/OSHA3492QuickCardLabel.pdf>

<https://www.osha.gov/Publications/OSHA3491QuickCardPictogram.pdf>

Thank You

Questions?

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